The following listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Previously Amended) A railroad tie comprising:

a railroad tie having at least four longitudinal sides, two end faces and a longitudinal axis, wherein at least one longitudinal side has an arrangement of concave shapes in the surface thereof, said shapes having a depth of at least 1/8 of an inch and having sidewalls which are at an angle of less than 90°, wherein said tie is made from polymeric material, and

said concave shapes are in the form of truncated cones in which the sides of the truncated cone shapes are at an angle of 30-60 degrees with respect to said at least one longitudinal side, or said concave shapes are truncated pyramidal shapes in which the sides of the truncated pyramidal shapes are at an angle of 30-60 degrees with respect to said at least one longitudinal side.

2. (Canceled)

3. (Previously Amended) A railroad tie according to claim 1, wherein said concave shapes are in the form of truncated cones.

4. (Previously Amended) A railroad tie according to claim 1, wherein said concave shapes are truncated pyramidal shapes.

Claims 5-7 (Canceled)

8. (Original) A railroad tie according to claim 3, wherein the concave shapes at their base have a relative diameter of 3/4 - 2 inches.

9. (Original) A railroad tie according to claim 4, wherein the concave shapes at their base have a relative diameter of 3/4 - 2 inches.

Claims 10-12 (Canceled).

13. (Original) A railroad tie according to claim 3, wherein the concave shapes have a depth of ¼- ½ inches.

14. (Original) A railroad tie according to claim 4, wherein the concave shapes have a depth of ¼- ½ inches.

15. (Previously Amended) A railroad tie according to claim 8, wherein the concave shapes have a depth of 1/4 - ½ inches.

16. (Previously Amended) A railroad tie according to claim 9, wherein the concave shapes have a depth of 1/4 - ½ inches.

17. (Previously Amended) A railroad tie according to claim 1, wherein said tie is formed from a material comprising a polymeric component selected from polyolefins, polystyrene, rubber and mixtures thereof, and optionally a filler component selected from fiber glass, mineral fillers, wood fibers, steel fibers and mixtures thereof.

18. (Original) A railroad tie according to claim 17, wherein said polymer component contains HDPE.

19. (Original) A railroad tie according to claim 17, wherein said tie contains: (1) HDPE and fiberglass; (2) HDPE, polystyrene and fiberglass; (3) HDPE, polypropylene and fiber glass; (4) HDPE and talc and/or gypsum; (5) HDPE, rubber, mineral filler and fiber glass; (6) HDPE, polypropylene and wood fiber; (7) HDPE and wood fiber or (8) HDPE, polystyrene, and wood fiber.

20. (Previously Amended) A railroad tie according to claim 1, wherein said tie is formed from a plastic composite material comprising 20-50 wt% of a polystyrene component and 50-80 wt% of a polyolefin component, and said polystyrene component

contains at least 90 wt% polystyrene and said polyolefin component contains at least 75 wt% high density polyethylene.

21. (Amended) A railroad tie comprising:

a railroad tie having at least four longitudinal sides, two end faces and a longitudinal axis, wherein at least one longitudinal side has an arrangement of concave shapes in the surface thereof, said shapes having a depth of at least 1/8 of an inch and having sidewalls which are at an angle of less than 90°, wherein said tie is made from polymeric material, and

said concave shapes are in the form of truncated cones in which the sides of the truncated cone shapes are at an angle of 30-60 degrees with respect to said at least one longitudinal side, or said concave shapes are truncated pyramidal shapes in which the sides of the truncated pyramidal shapes are at an angle of 30-60 degrees with respect to said at least one longitudinal side,

~~A railroad tie according to claim 1,~~

wherein regions adjacent each end of said at least one longitudinal side have said concave shapes with a depth of less than 1 inch while other regions of said at least one longitudinal side have concave shapes with a depth greater than the depth of the concave shapes in said regions adjacent each end, the depth of said concave shapes in said other regions being up to 2 inches.

22. (Canceled)

23. (Previously Amended) A railroad tie according to claim 3, wherein regions adjacent each end of said at least one longitudinal side have said concave shapes with a depth of less than 1 inch while other regions of said at least one longitudinal side have concave shapes with a depth greater than the depth of the concave shapes in said regions adjacent each end, the depth of said concave shapes in said other regions being up to 2 inches.

24. (Previously Amended) In a method of maintaining desired spacing between railroad rails comprising attaching said rails to at least one railroad tie, the improvement wherein said at least one railroad tie is in accordance with claim 1.

25. (Previously Amended) In a method of providing a weight bearing support surface for railroad rails comprising attaching said rails to at least one railroad tie, the improvement wherein said at least one railroad tie is in accordance with claim 1.

26. (Previously Added) A railroad tie according to claim 4, wherein regions adjacent each end of said at least one longitudinal side have said concave shapes with a depth of less than 1 inch while other regions of said at least one longitudinal side have concave shapes with a depth greater than the depth of the concave shapes in said regions adjacent each end, the depth of said concave shapes in said other regions being up to 2 inches.

27. (Previously Added) A railroad tie according to claim 15, wherein the sides of the truncated cone shapes are at an angle of 40-50 degrees with respect to said at least one longitudinal side.

28. (Previously Added) A railroad tie according to claim 16, wherein the sides of the truncated pyramidal shapes are at an angle of 40-50 degrees with respect to said at least one longitudinal side.

29. (Previously Added) A railroad tie according to claim 15, wherein said tie is formed from a plastic composite material comprising 20-50 wt% of a polystyrene component and 50-80 wt% of a polyolefin component, and said polystyrene component contains at least 90 wt% polystyrene and said polyolefin component contains at least 75 wt% high density polyethylene.

30. (Previously Added) A railroad tie according to claim 16, wherein said tie is formed from a plastic composite material comprising 20-50 wt% of a polystyrene

component and 50-80 wt% of a polyolefin component, and said polystyrene component contains at least 90 wt% polystyrene and said polyolefin component contains at least 75 wt% high density polyethylene.

31. (Previously Added) A railroad tie according to claim 27, wherein said tie is formed from a plastic composite material comprising 20-50 wt% of a polystyrene component and 50-80 wt% of a polyolefin component, and said polystyrene component contains at least 90 wt% polystyrene and said polyolefin component contains at least 75 wt% high density polyethylene.

32. (Previously Added) A railroad tie according to claim 28, wherein said tie is formed from a plastic composite material comprising 20-50 wt% of a polystyrene component and 50-80 wt% of a polyolefin component, and said polystyrene component contains at least 90 wt% polystyrene and said polyolefin component contains at least 75 wt% high density polyethylene.

33. (Previously Added) A railroad tie according to claim 15, wherein the distance from the center of one concave shape to the center of an adjacent concave shape is 1 ½ to 2 ½ inches.

34. (Previously Added) A railroad tie according to claim 16, wherein the distance from the center of one concave shape to the center of an adjacent concave shape is 1 ½ to 2 ½ inches.